

APPROVED	C.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

TITLE: APPARATUS FOR RAPID SENSOR-ARRAY BASED MATERIALS CHARACTERIZATION
 APPLICANTS: PAUL MANSKY ET AL.
 APPLICATION NO.: 09/210,485
 1/25

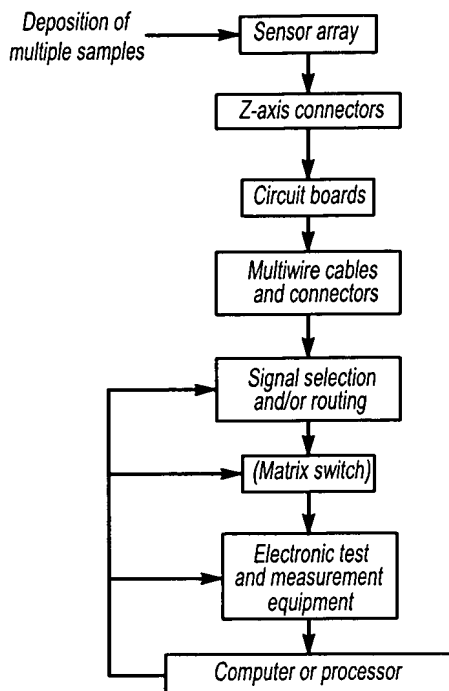


Fig-1 B

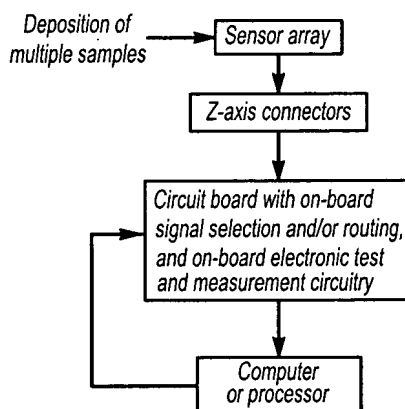


Fig-1 D

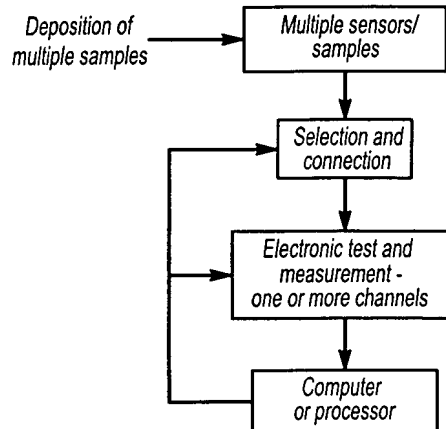


Fig-1 A

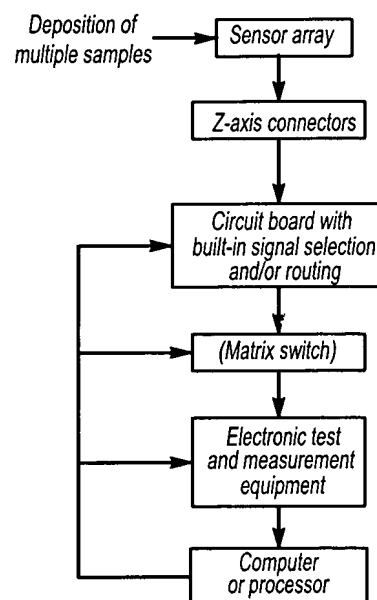


Fig-1 C

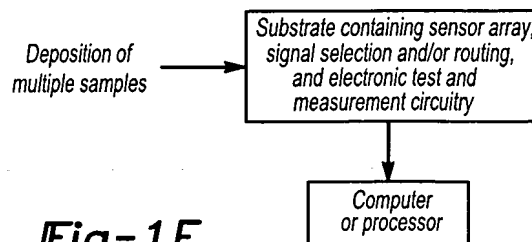


Fig-1 E

APPROVED	DATE	FILE
BY	CLASS	SUBCLASS
DRAFTSMAN		

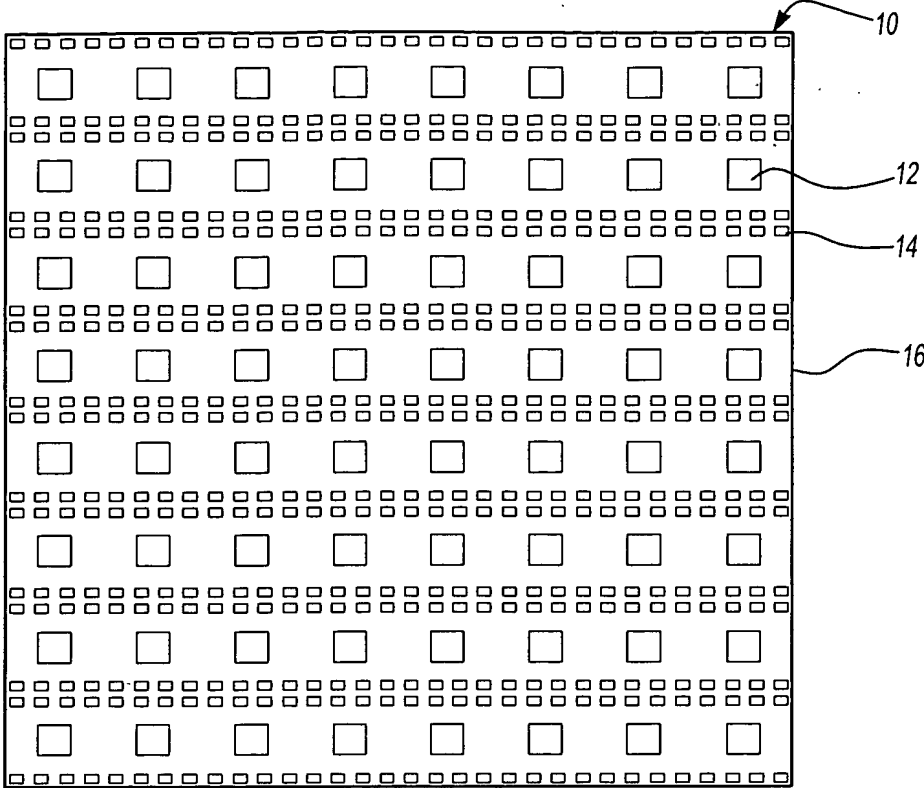


Fig-2A

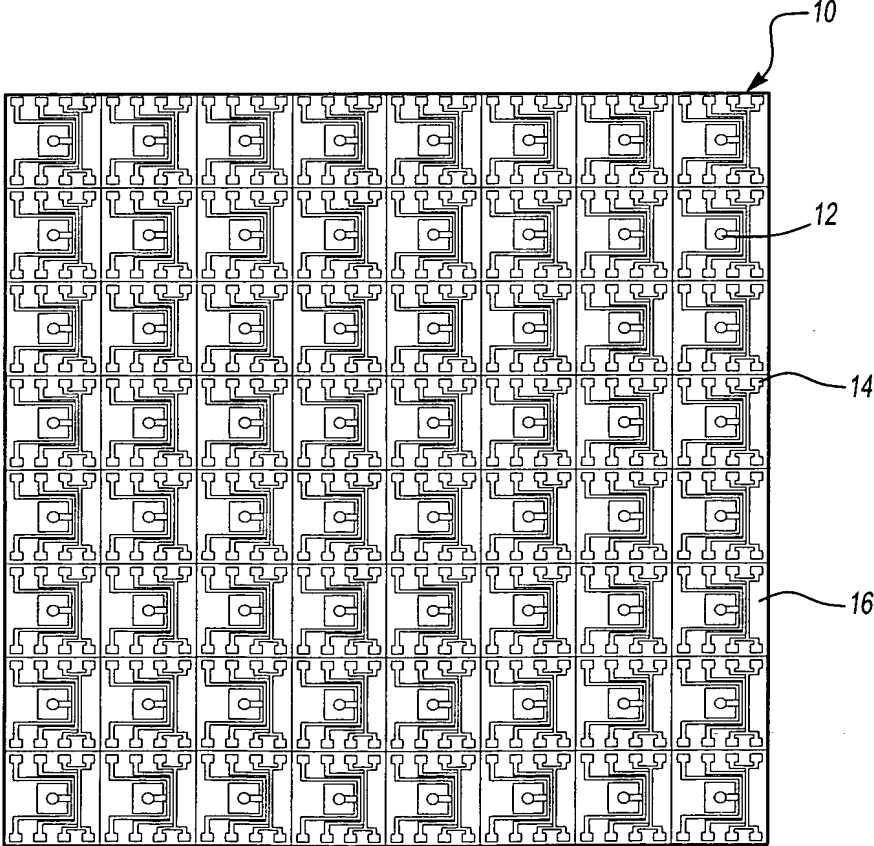


Fig-2B

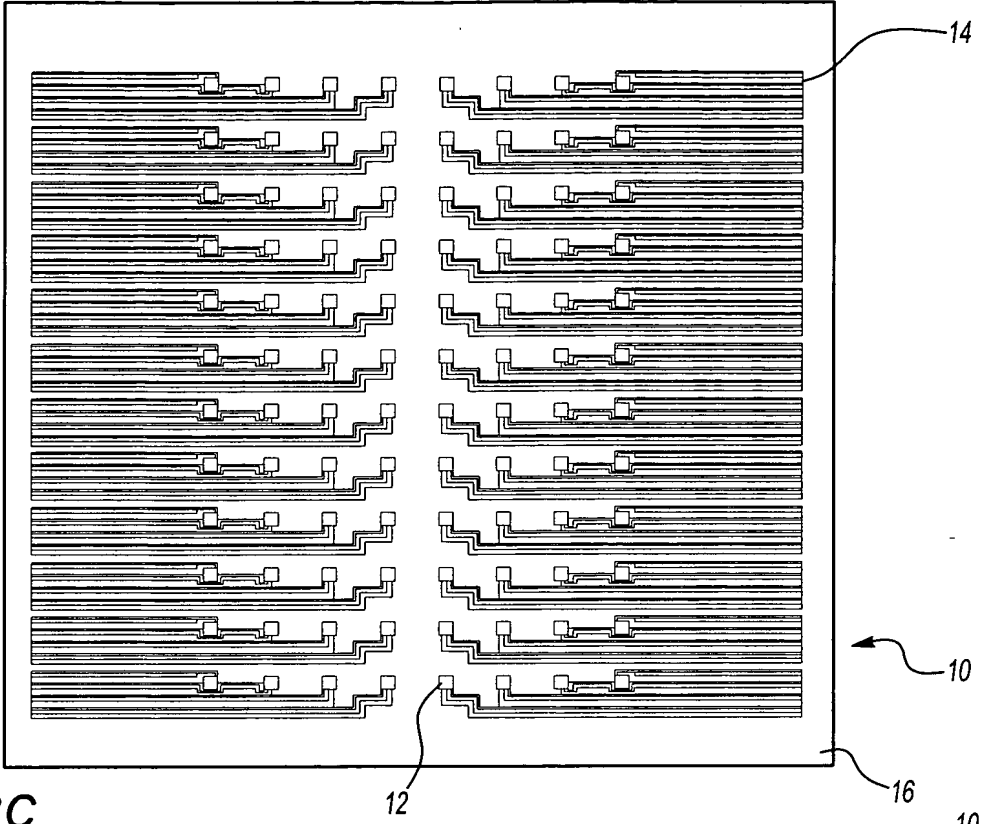


Fig-2C

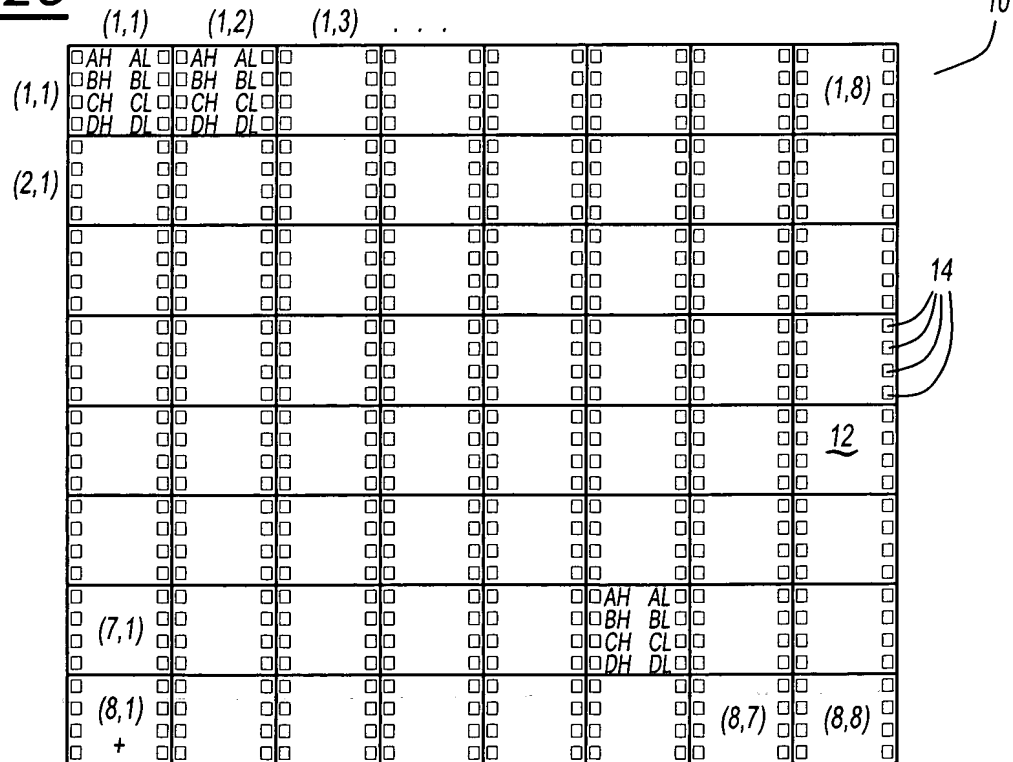


Fig-2D

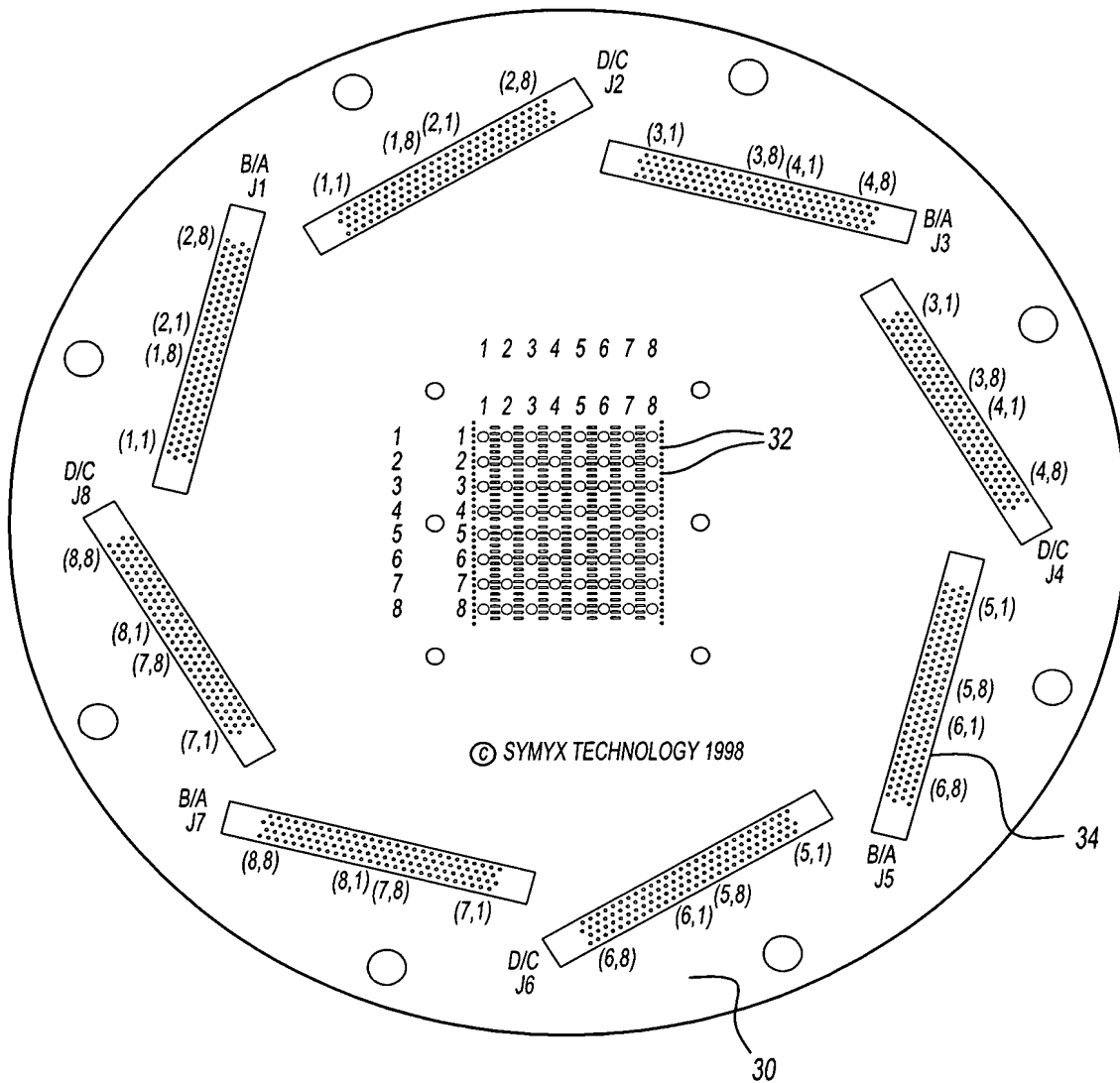


Fig-3A

APPROVED		
BY	CLASS	SUBCLASS
DRAFTSMAN		

TITLE: APPARATUS FOR RAPID SENSOR-ARRAY BASED MATERIALS CHARACTERIZATION
APPLICANTS: PAUL MANSKY ET AL.
APPLICATION NO.: 09/210,485
5/25

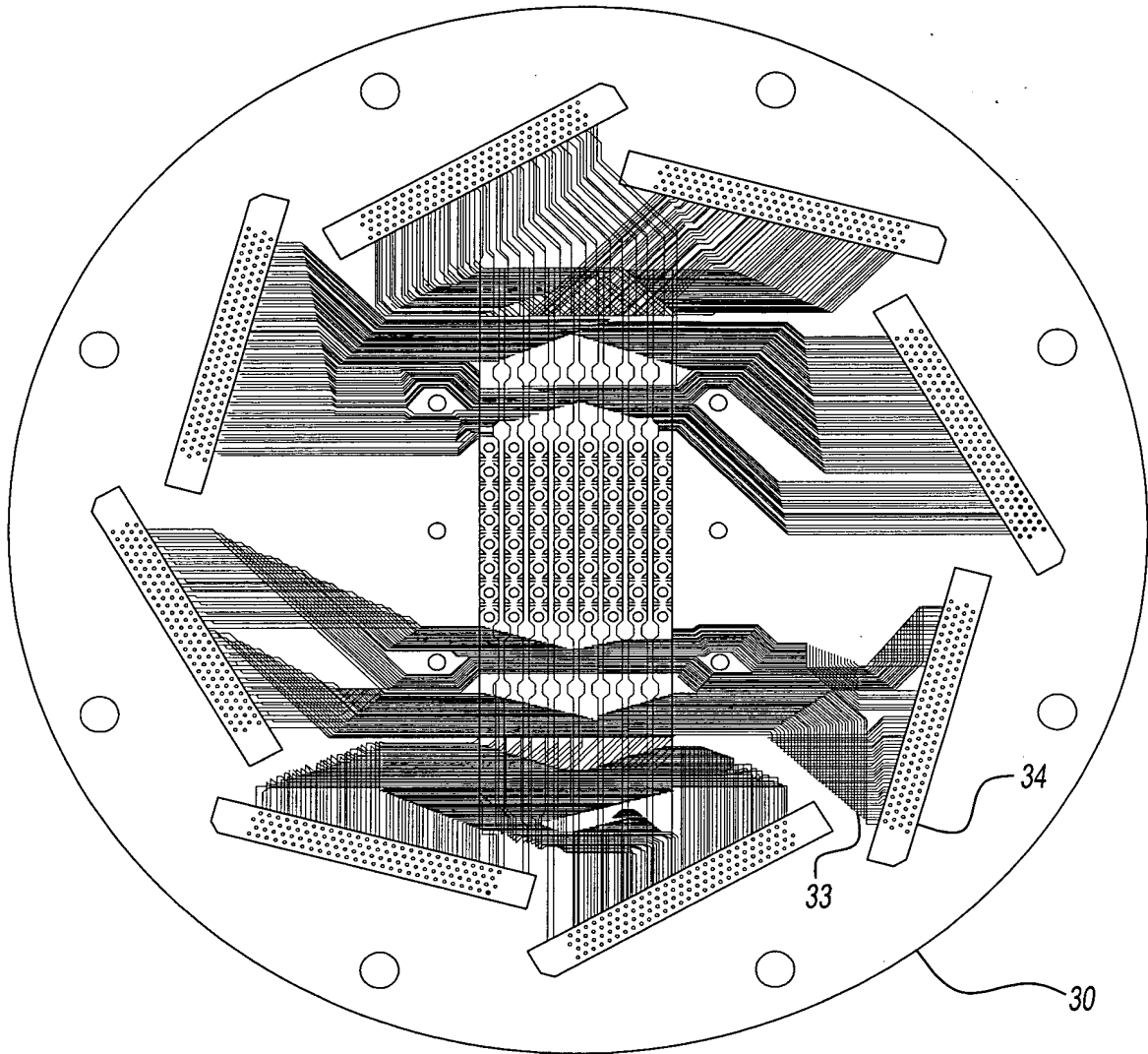


Fig-3B



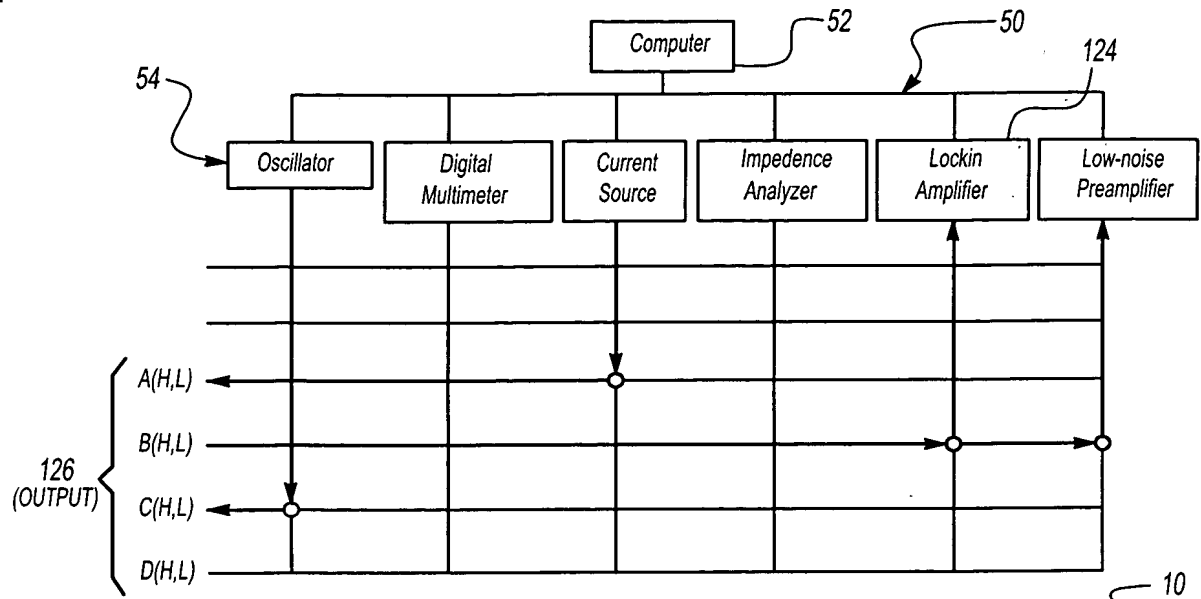


Fig-5

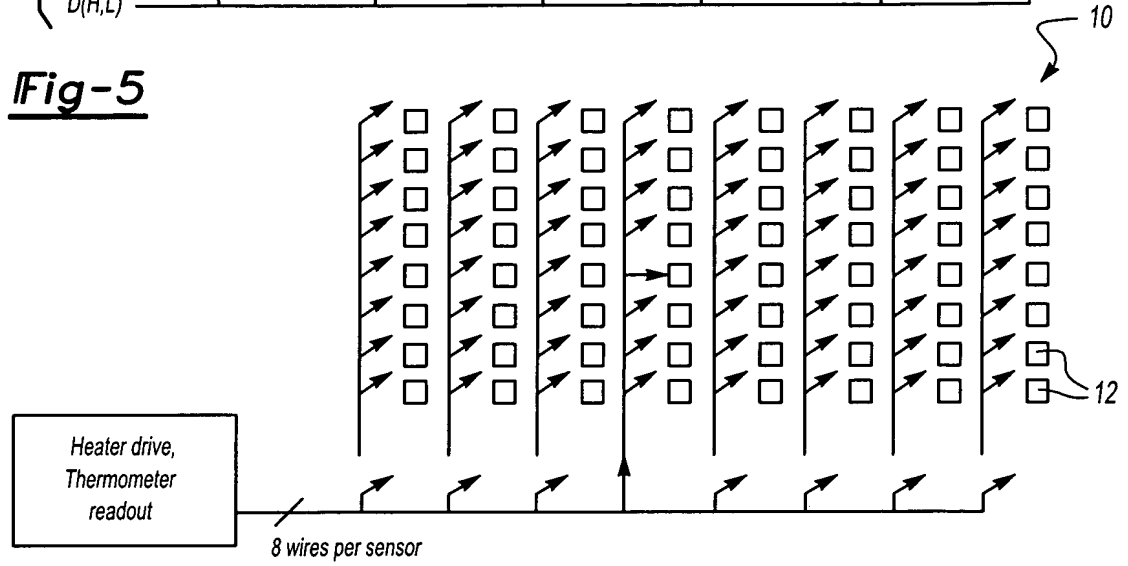


Fig-6A

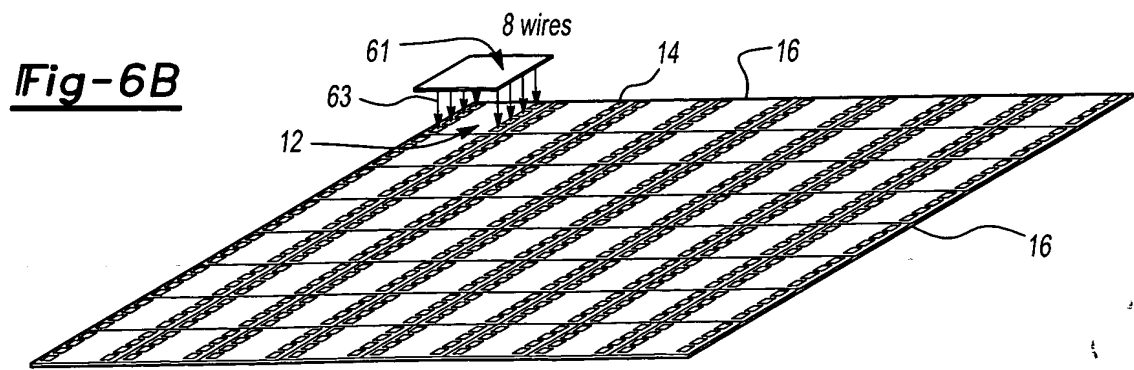


Fig-6B

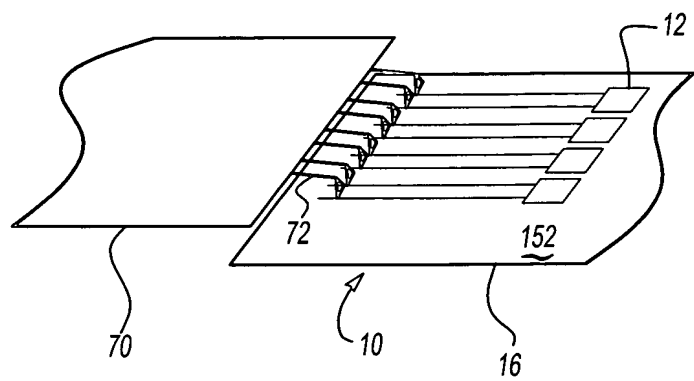


Fig-7

Fig-8

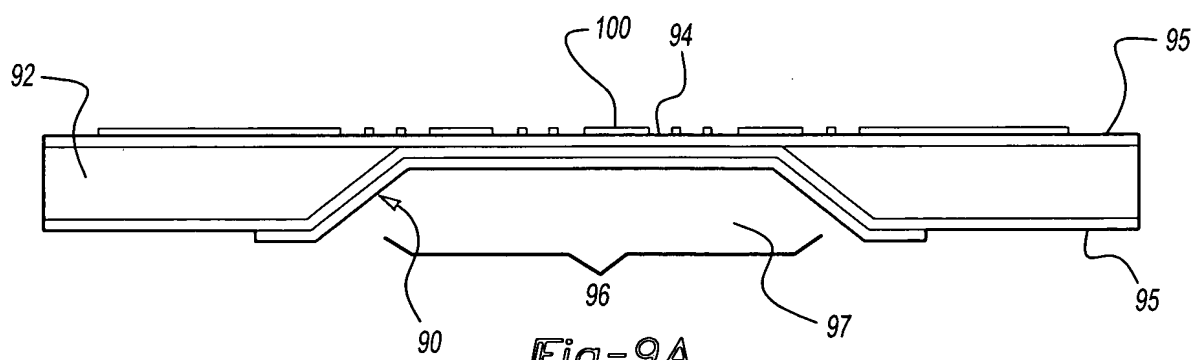
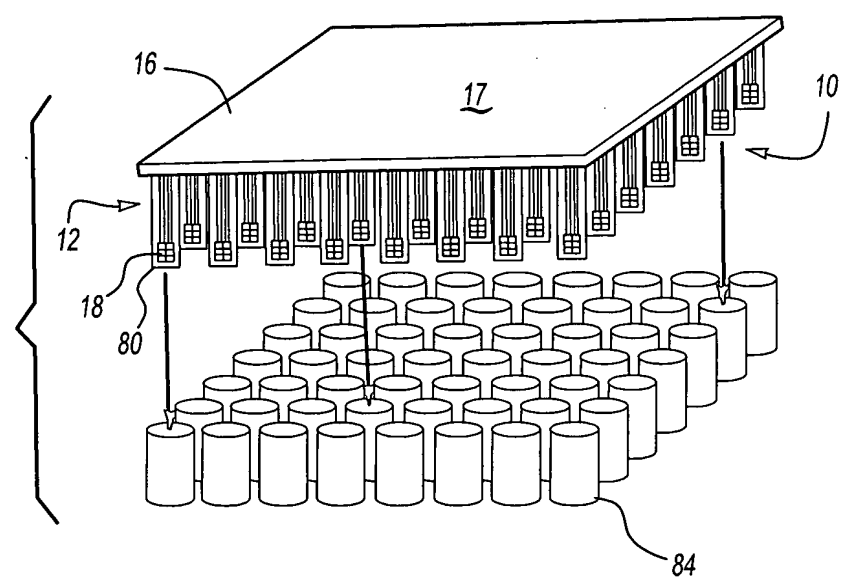


Fig-9A

Fig-9B

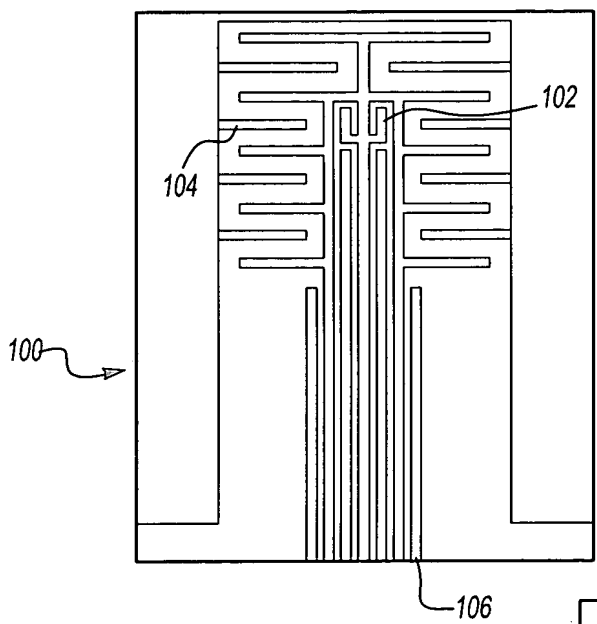
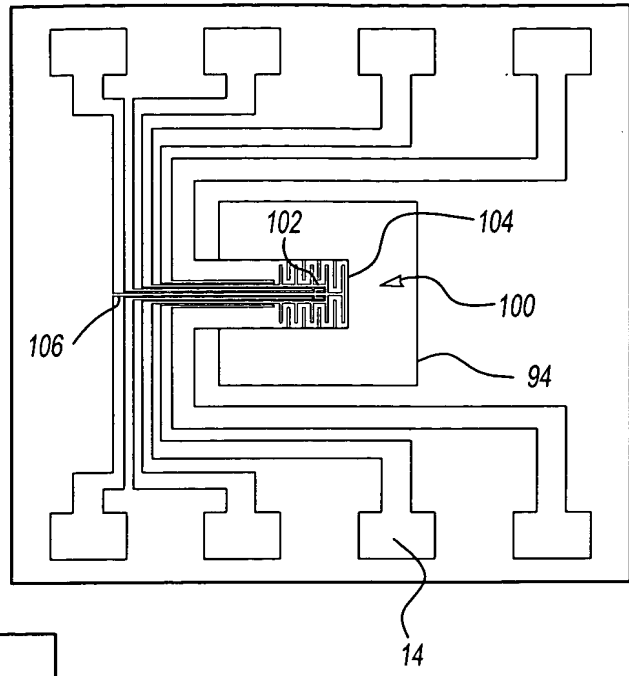
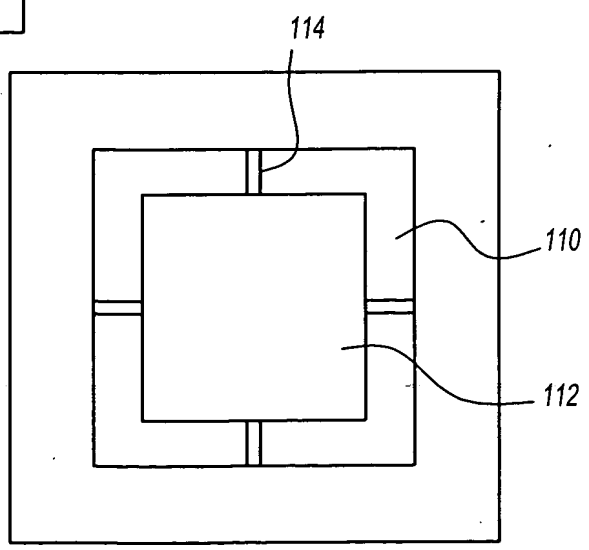


Fig-9C

Fig-10



APPROVED	C.G. PILL
BY	CLASS
DRAFTSMAN	SUBCLASS

Fig-11A

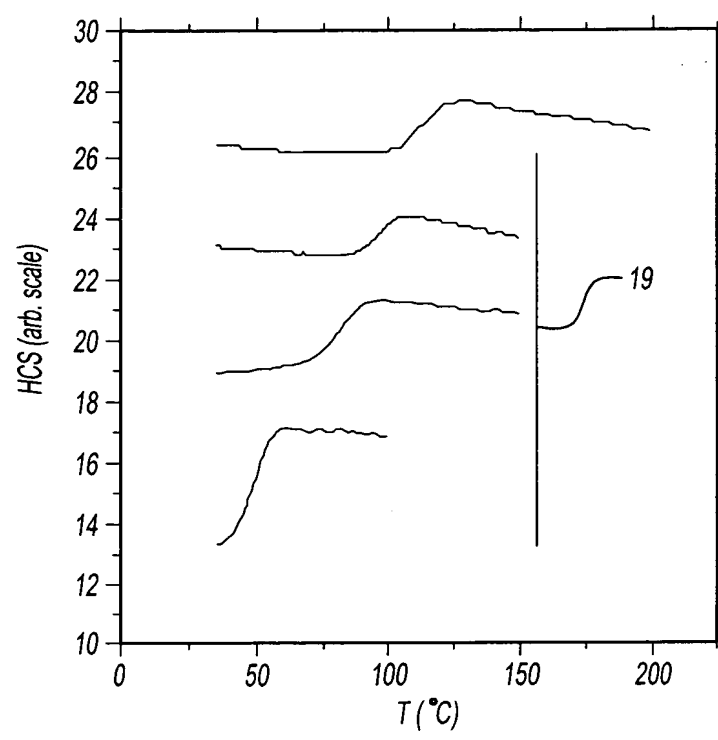
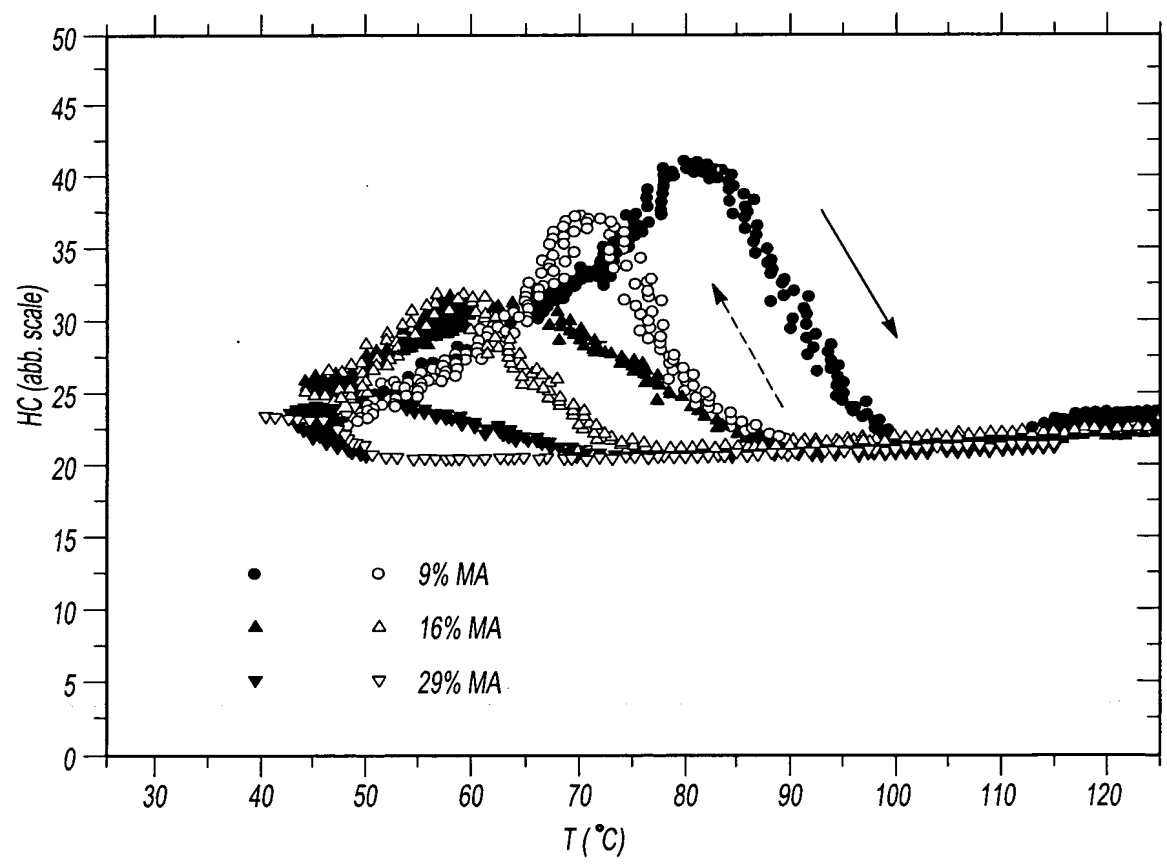


Fig-11B



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

TITLE: AF STATUS FOR RAPID SENSOR-ARRAY BASED MATERIALS C
 APPLICANTS: PAUL MANSKY ET AL.
 APPLICATION NO.: 09/210,485
 11/25

CTERIZATION

Fig-11C

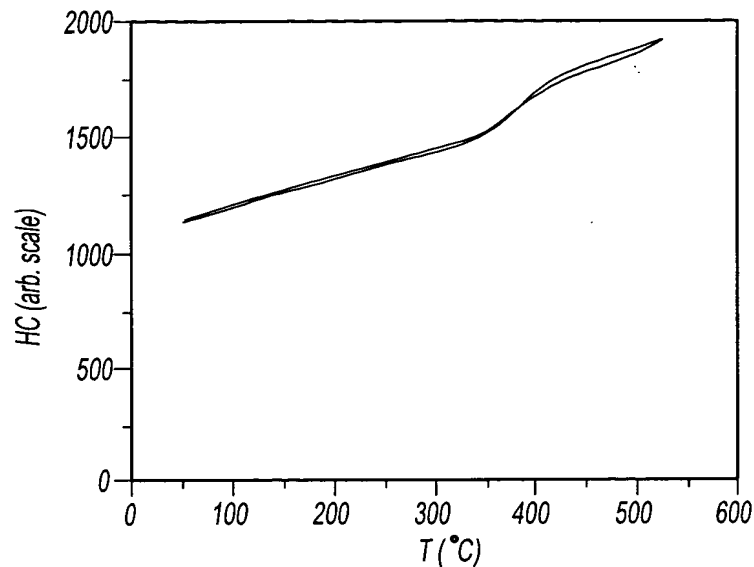


Fig-11D

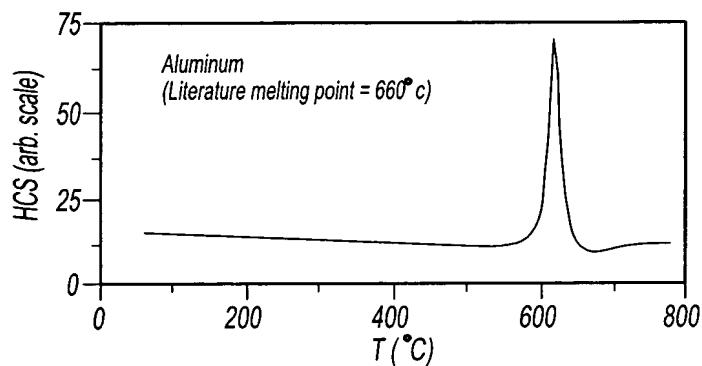


Fig-11E

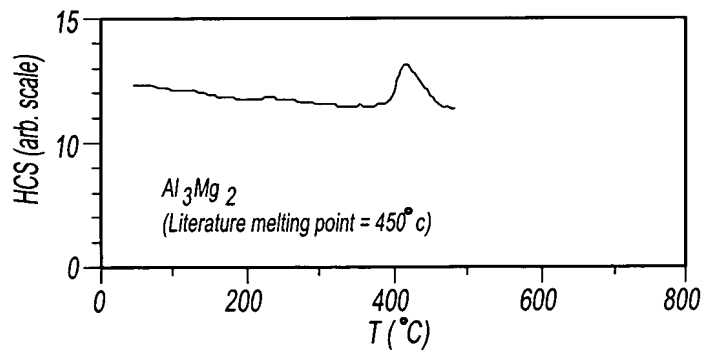
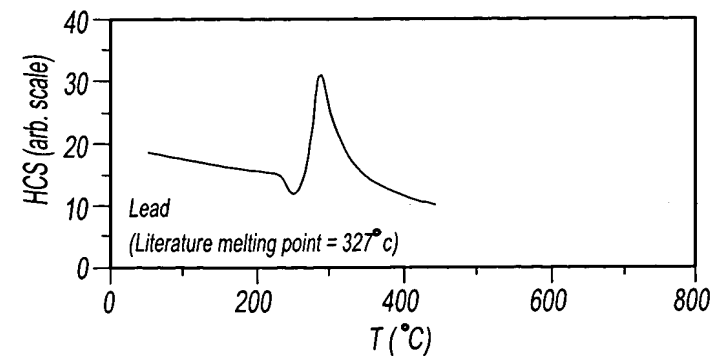


Fig-11F



APPROVED	O.G. F.M.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

TITLE: APPARATUS FOR RAPID SENSOR-ARRAY BASED MATERIALS CHARACTERIZATION
 APPLICANTS: PAUL MANSKY ET AL.
 APPLICATION NO.: 09/210,485
 12/25

Fig-12A

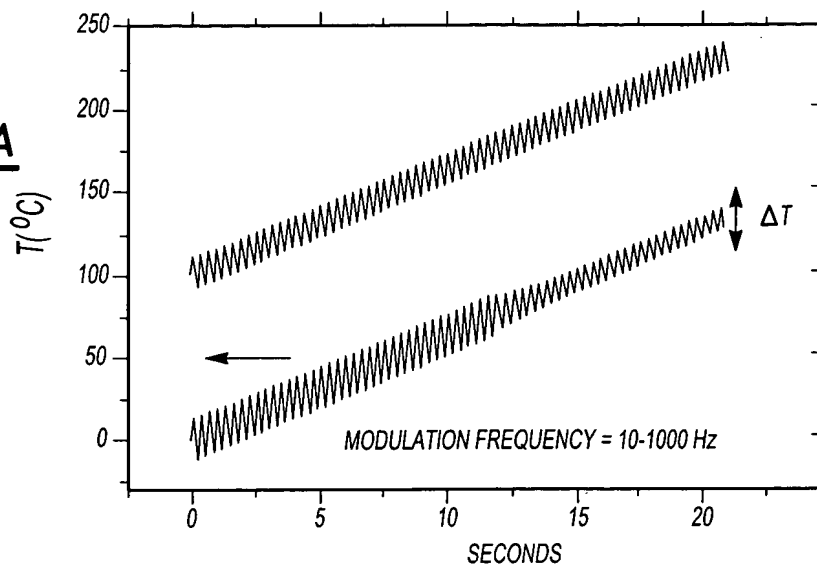


Fig-12B

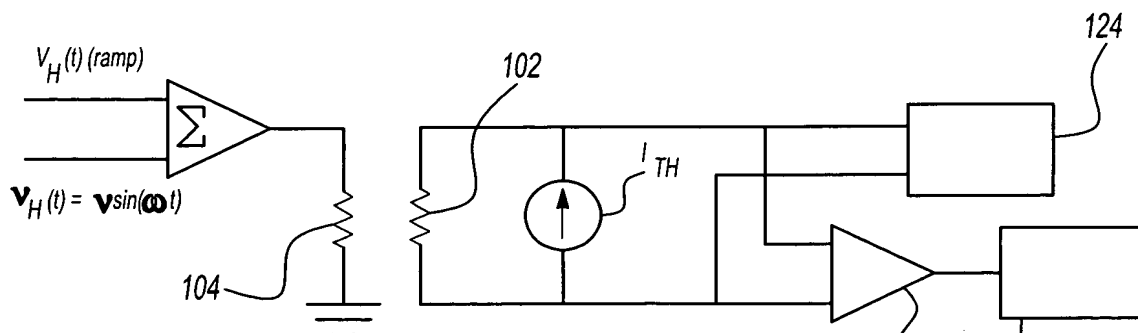
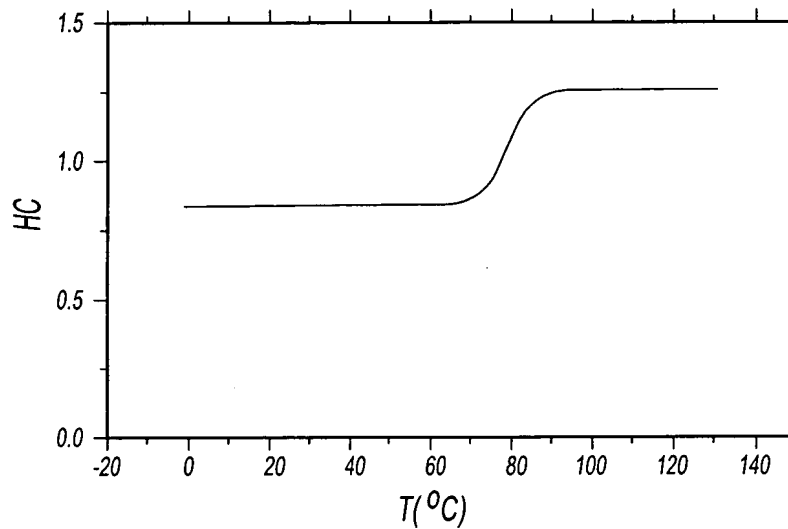


Fig-12C

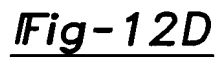


Fig-12E

DC HEATER
DRIVE VOLTAGE
 $V_{H_2O}(t)$

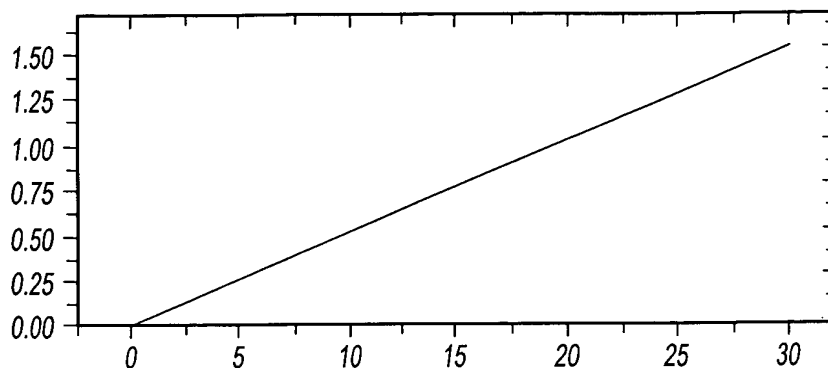


Fig-12F

AVERAGE THER-
MOMETER VOLTAGE
 $\langle V_{TH} \rangle$

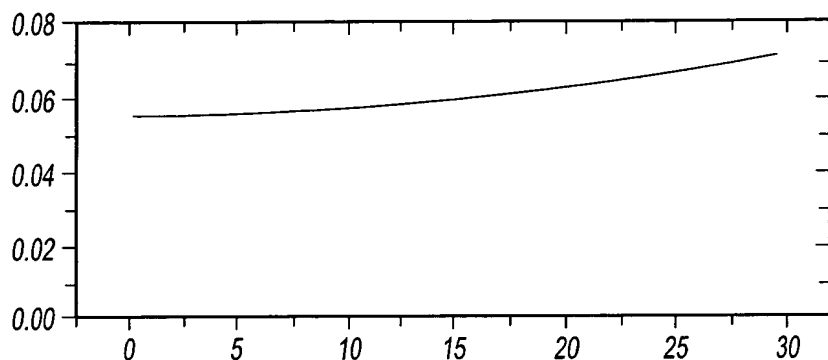


Fig-12G

2 ω MODULATION
VOLTAGE
 $V_{TH}(2\omega)$

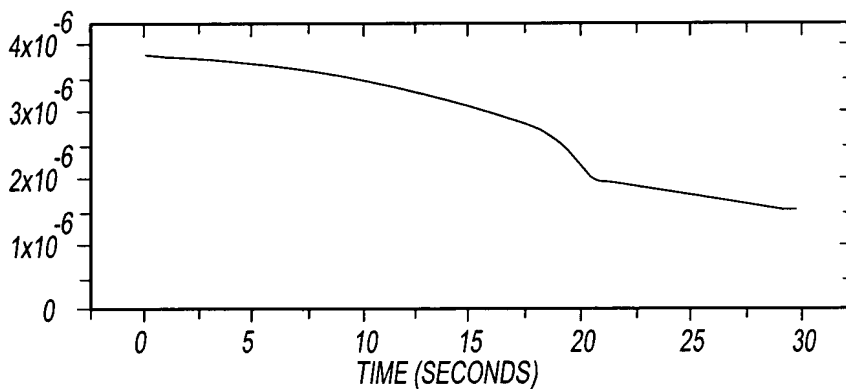
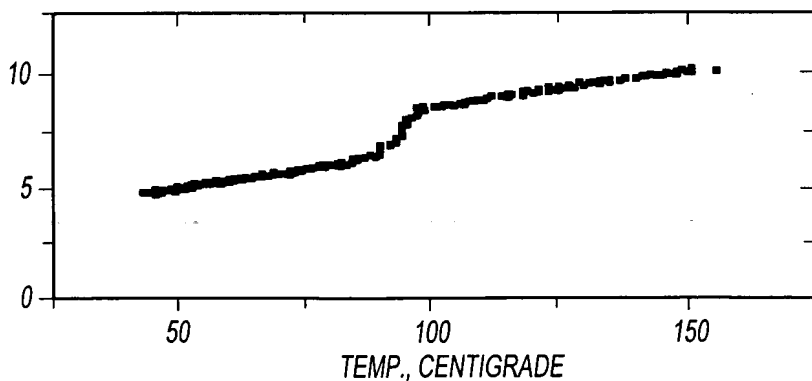


Fig-12H

HEAT CAPACITY
(ARB. SCALE) C_p



APPROVED
BY
DRAFTSMAN

CLASS

TITLE: AP - STATUS FOR RAPID SENSOR-ARRAY BASED MATERIALS C
APPLICANTS: PAUL MANSKY ET AL.
APPLICATION NO.: 09/210,485
15/25

CTERIZATION

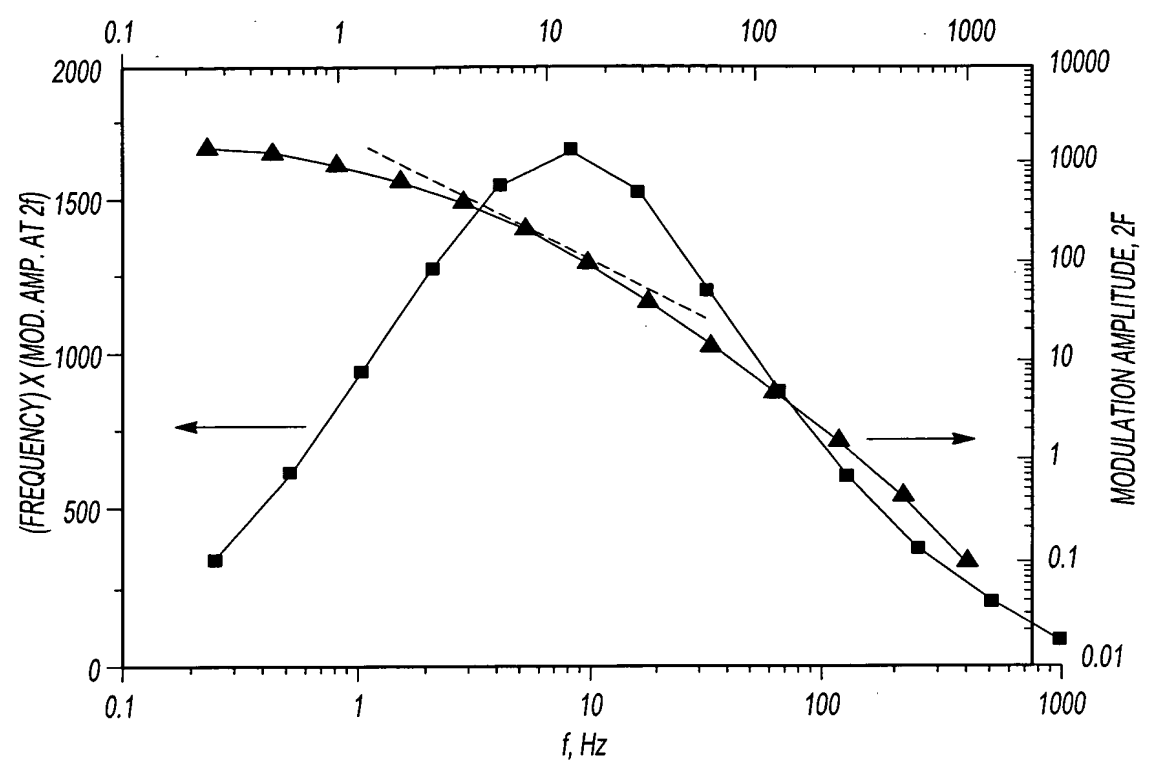


Fig-121

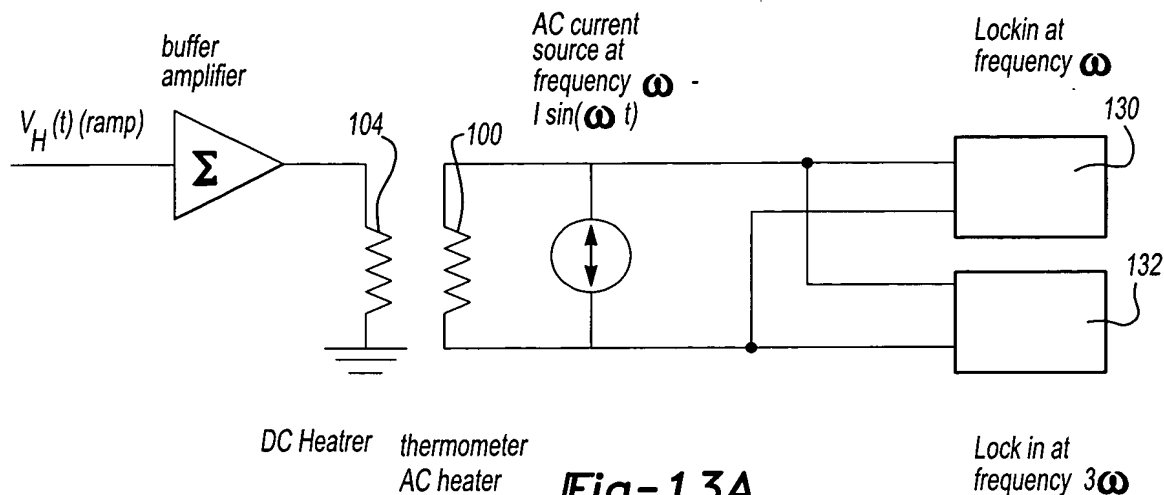


Fig-13A

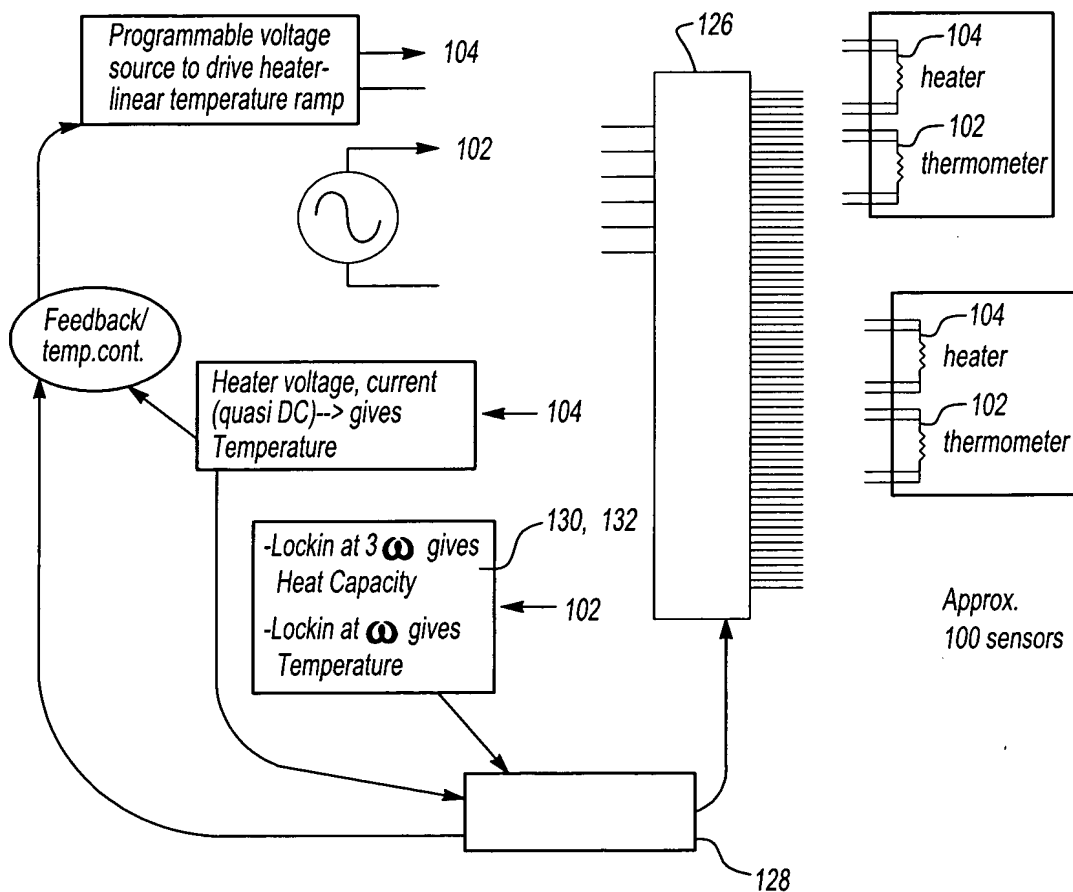


Fig-13B

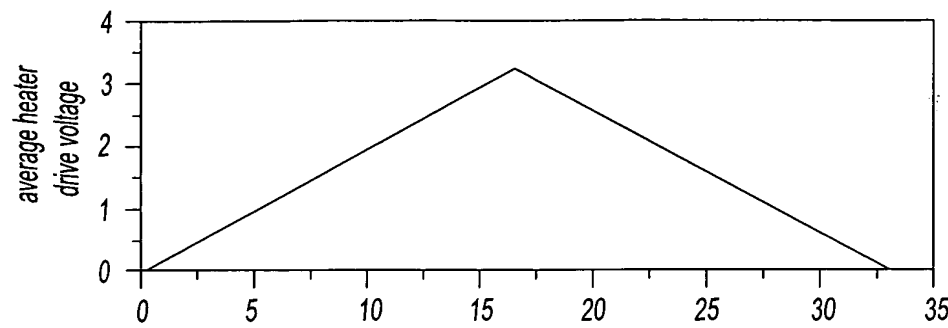


Fig-13C

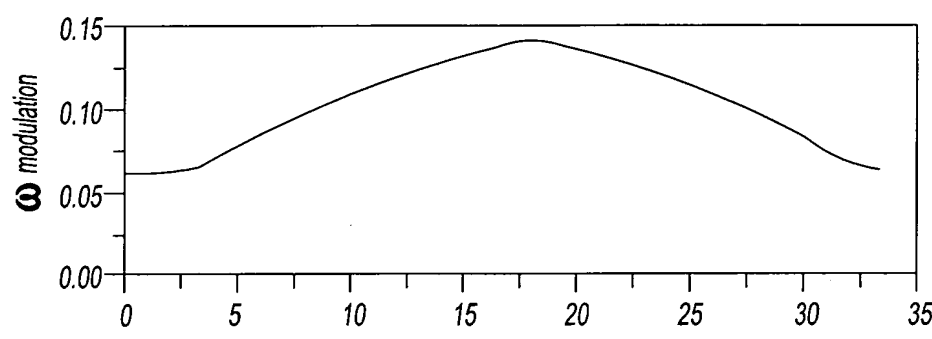


Fig-13D

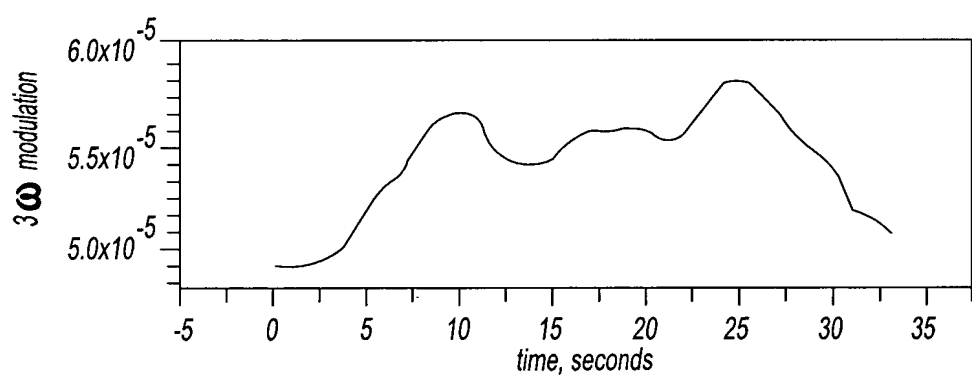


Fig-13E

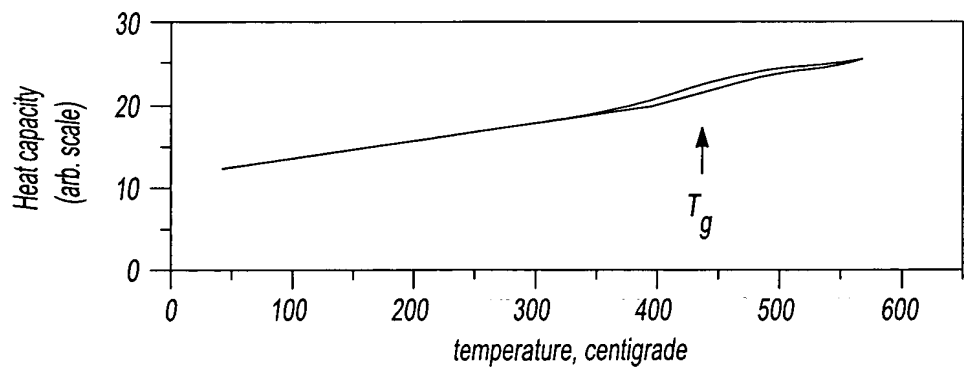


Fig-13F

$$I(t) = I_0(t) + I_{AC} \sin(\omega t)$$

$$V_0, V(\omega, 2\omega, 3\omega)$$

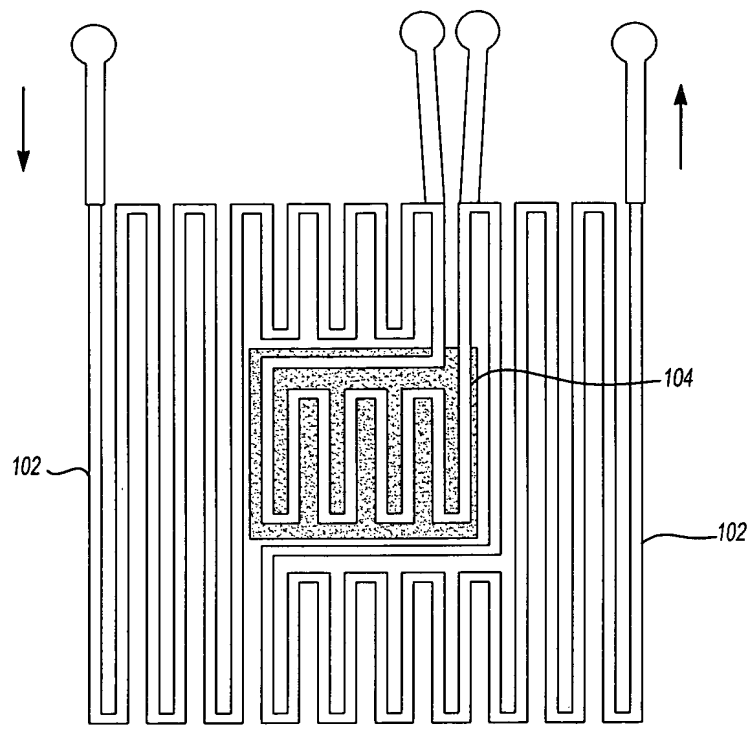


Fig-13G

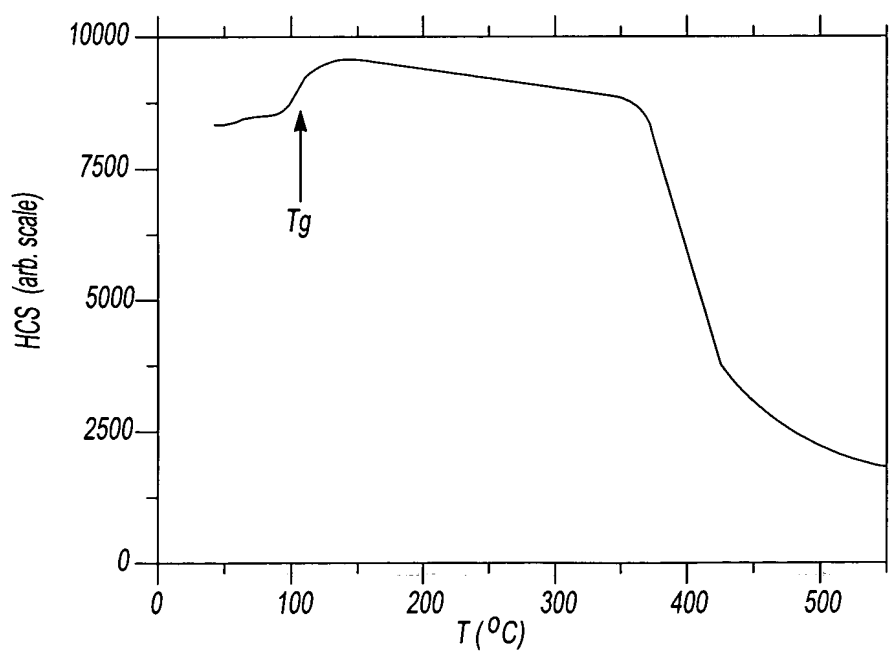


Fig-14

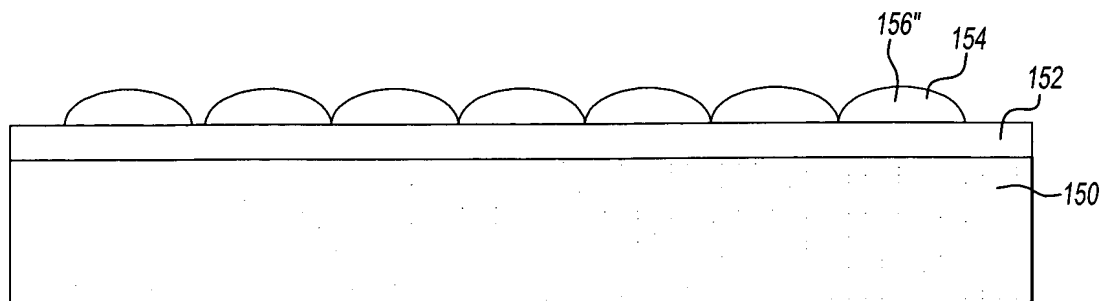


Fig-15A

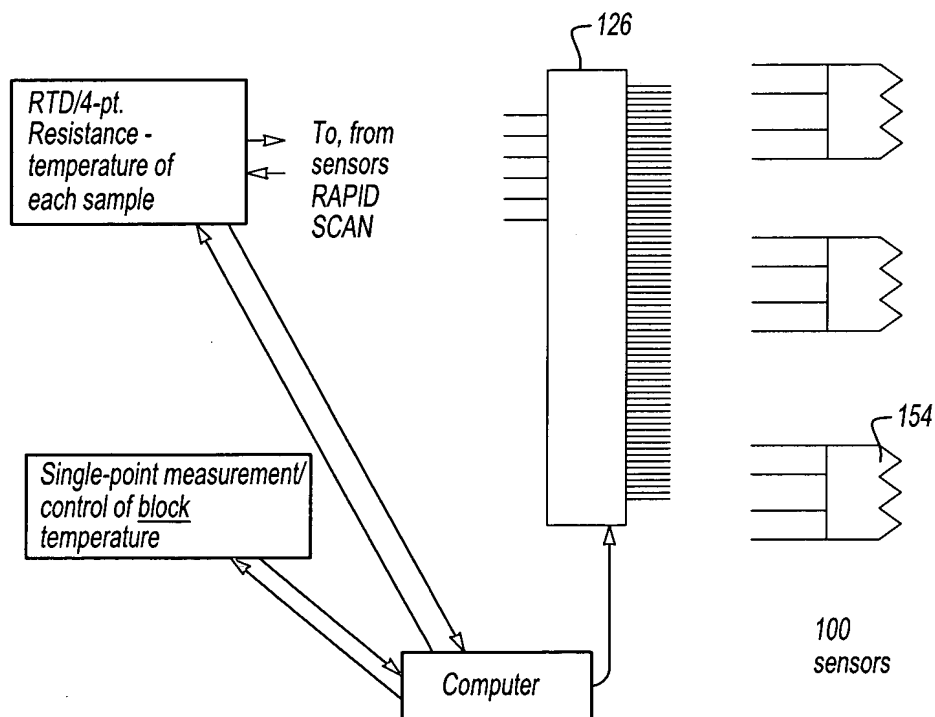


Fig-15B

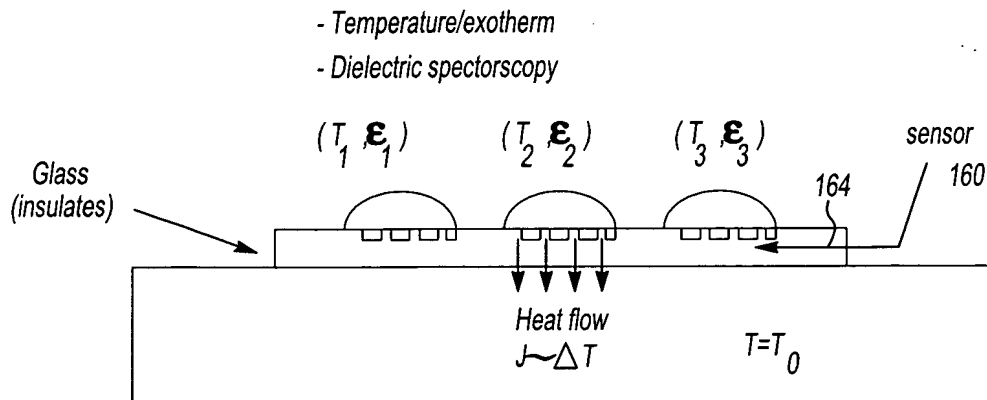


Fig-16A

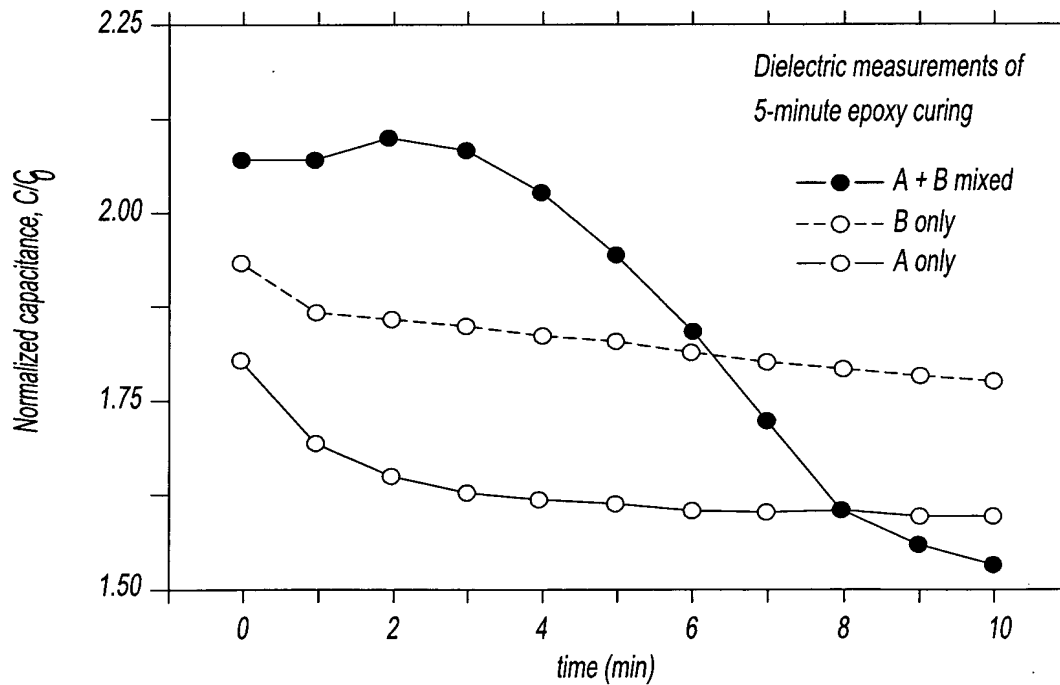
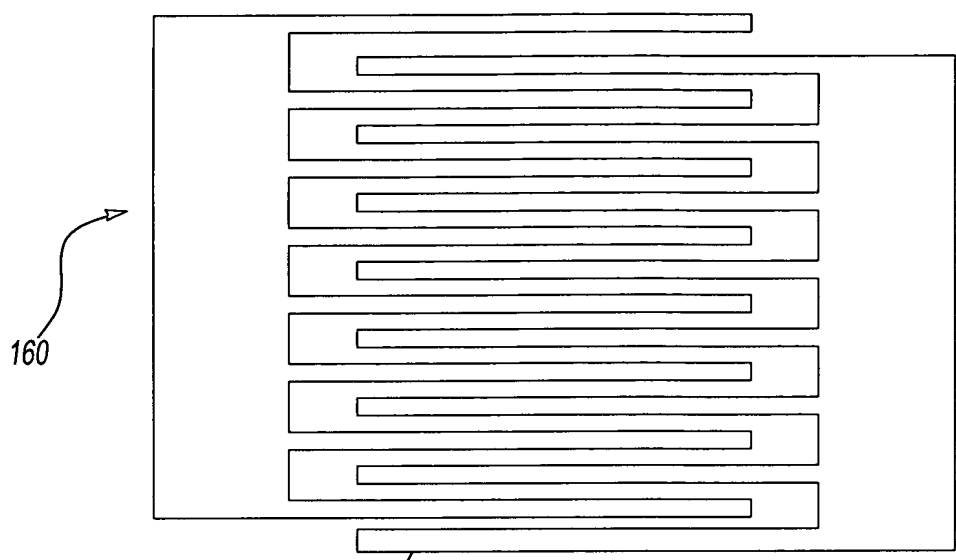


Fig-16B



162 Fig-16C

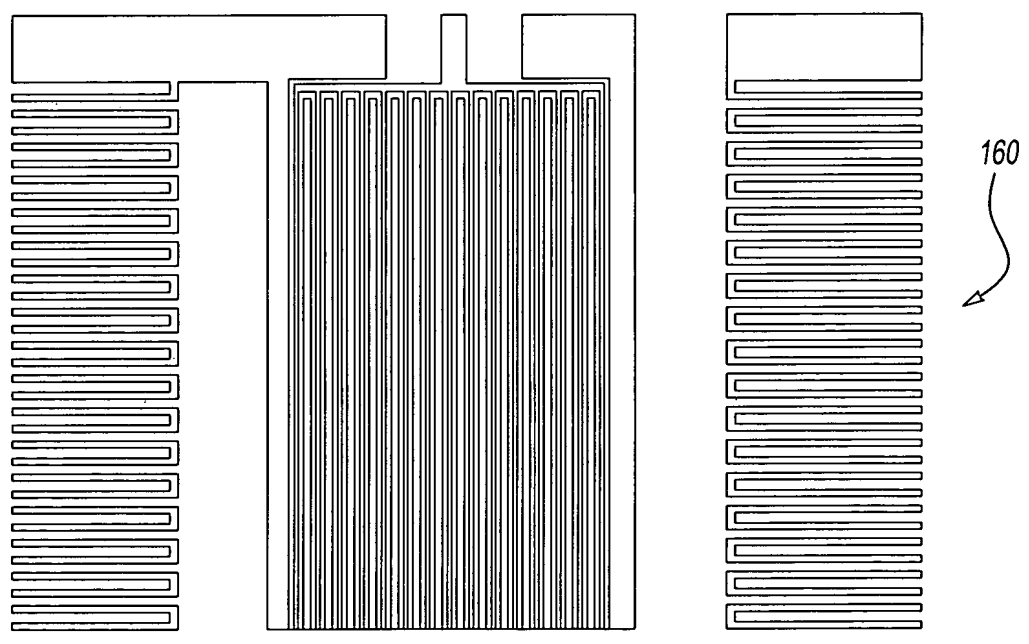
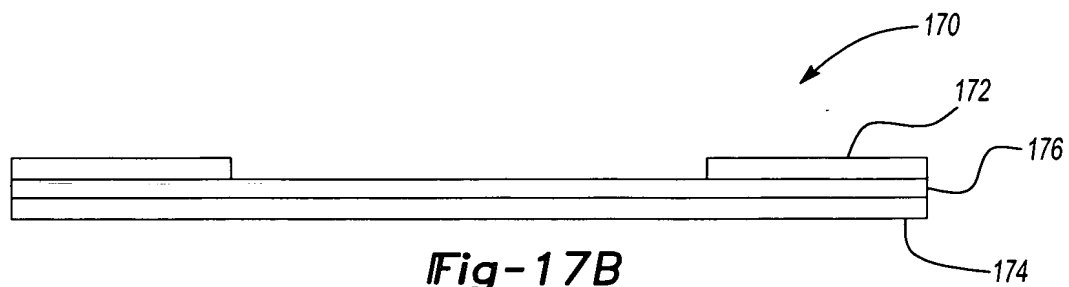
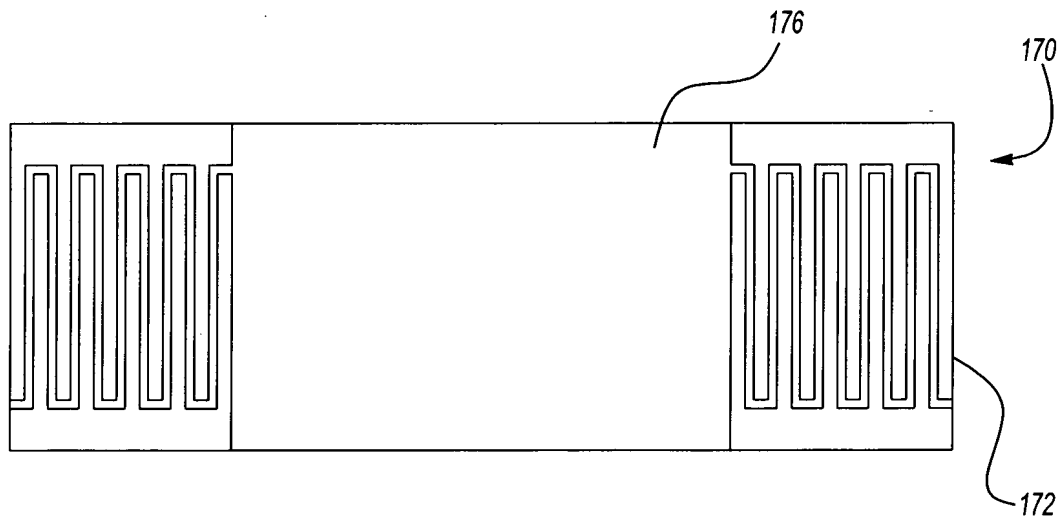
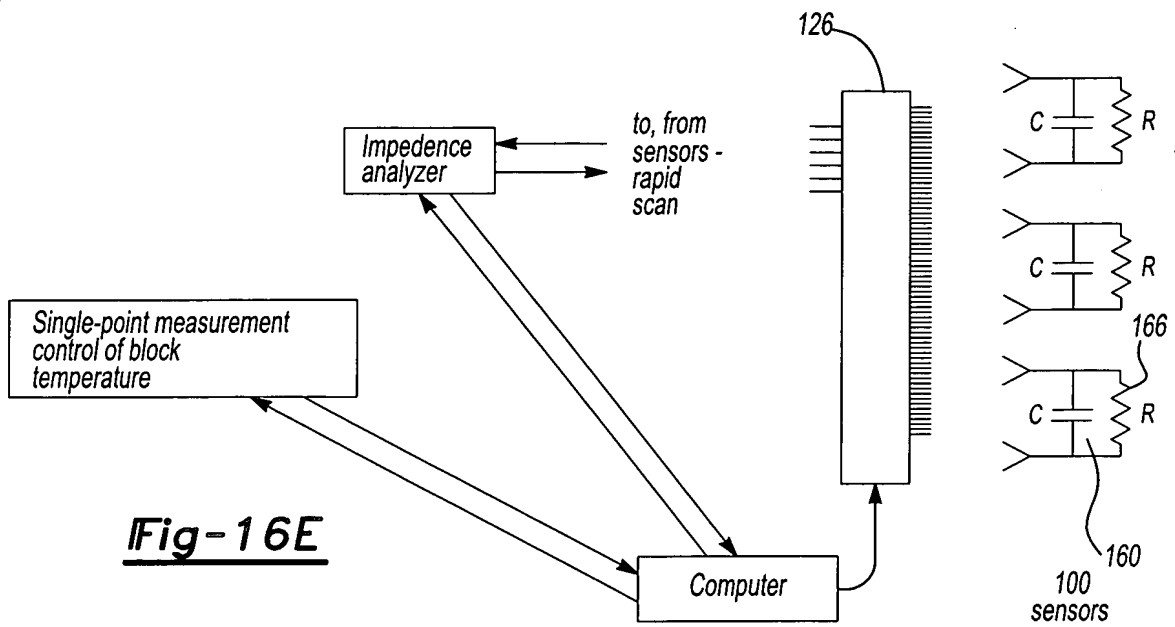


Fig-16D



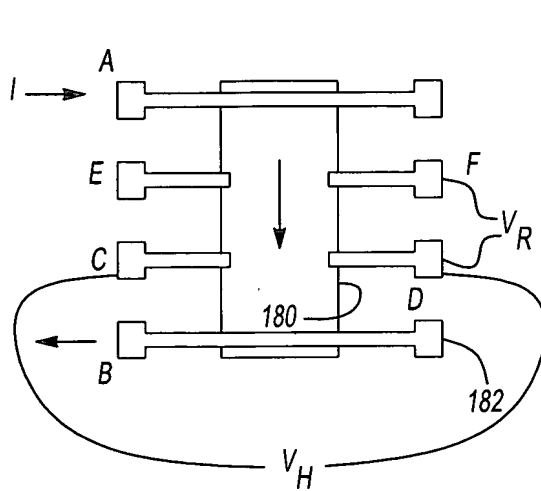


Fig-18A

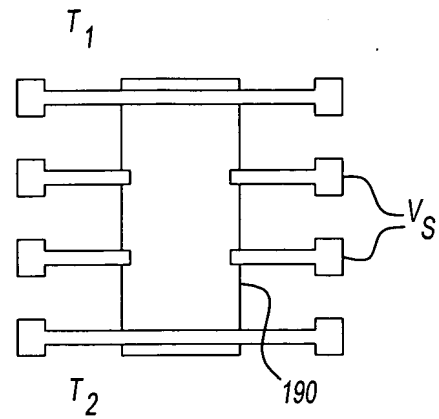


Fig-19A

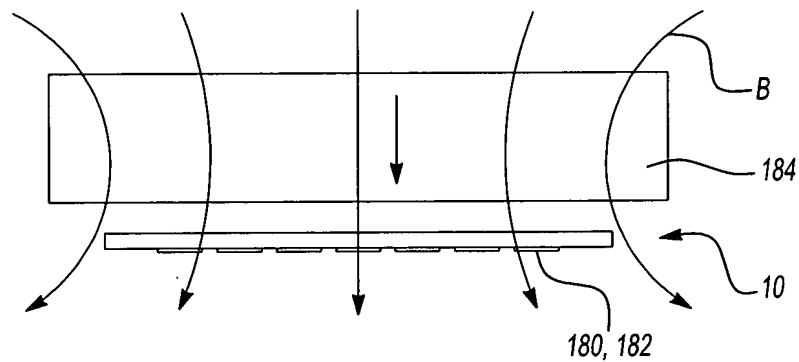


Fig-18B

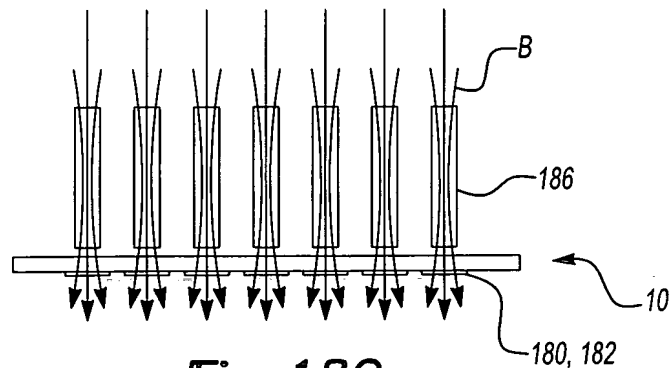


Fig-18C

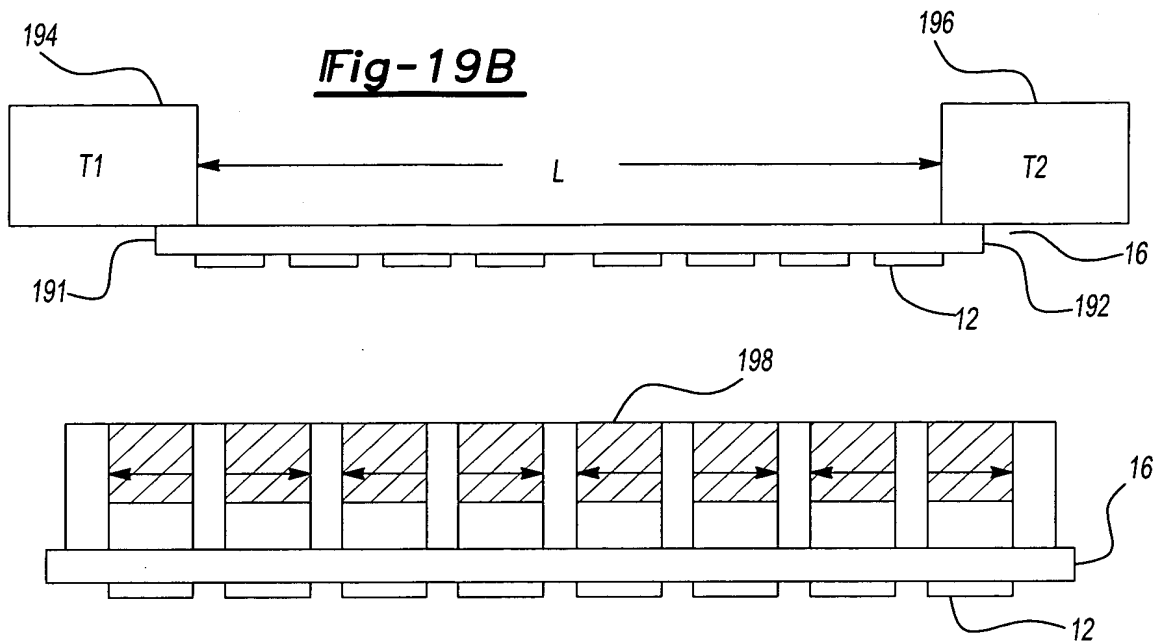


Fig-19C

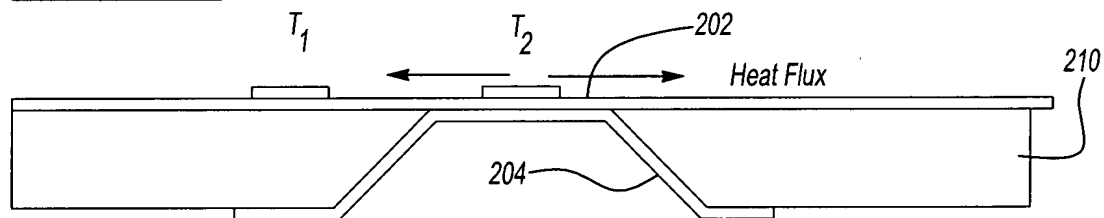


Fig-20A

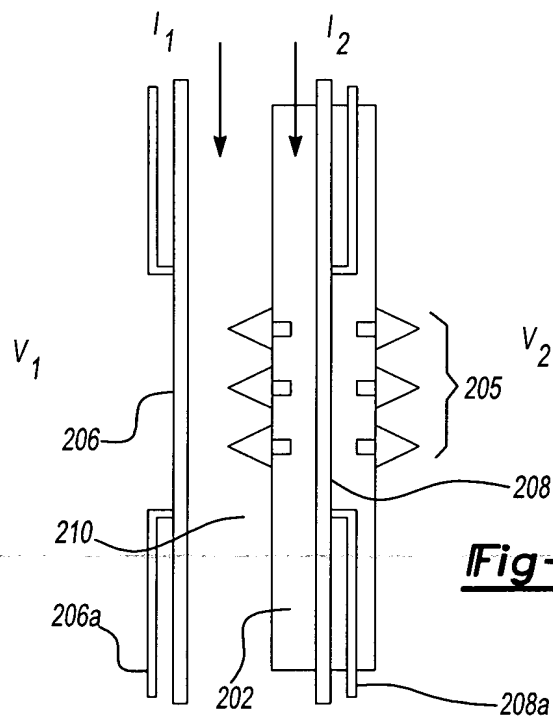


Fig-20B

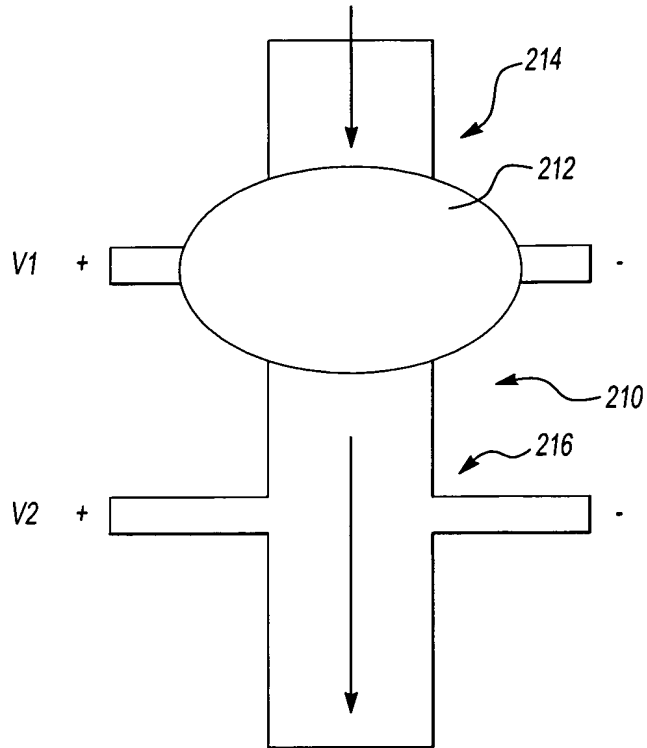


Fig-21A

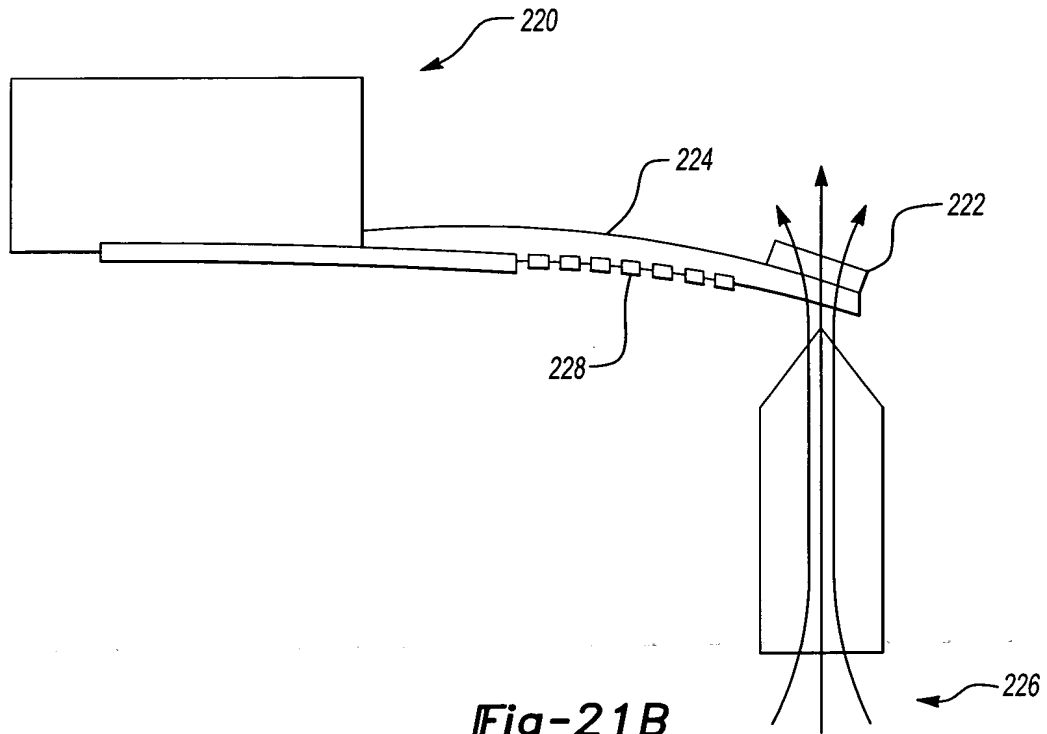


Fig-21B